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ABSTRACT

This is a study of institutionalization and leadership strategies within an educational research and development center. The data base is a case study of the center since its establishment in 1964. The conclusions point to certain clusters of decisions as having been crucial. For example, the selection of major target audiences for center work heightened the organization's ability to deal with these but reduced its ability to communicate with others. In addition, the form and structure of the leadership role has been a significant shaping factor. The study is of relevance to both long-existing and newly forming educational knowledge production institutes. (Author)

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LEADERSHIP IN THE INSTITUTIONALIZATION PROCESS: AN EXAMPLE FROM EDUCATIONAL R&D

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Introduction: Scene-setting

This paper focuses on a strategy for change in the knowledge production arrangements for educational practice. Prior to the mid-1960's, such arrangements did not exist in institutional form. The R&D centers program, initiated in 1964 by the Office of Education, began a series of institutes devoted to large-scale, programmatic educational R&D. At the time of their initiation, the internal structure of the institutes, their approach to building an R&D capability, were not specified by the government nor clearly foreseen by those in the field. What was known were the goals: mission-orientation, multidisciplinary knowledge production, programmatic R&D.

In order to accomplish these goals, several avenues to organization were open. One major distinction--in terms of approaching the question of R&D structure--is immediately salient. This is the distinction between a "coalition approach" vs. a "socializing approach" to organizational development. Internally, a coalition approach suggests the bringing together of a group of professionals with established preferences vis-a-vis work to be accomplished. Additionally, it suggests that the new research institute seeks to align itself with the preexisting priorities and values of important agencies and audiences external to it. A socializing approach implies the existence of a programmatic scope of work to be accomplished and recruitment of members to the organization for whom its values will become their own and who will view it important that their work is an integral contribution to the larger program. In dealing with audiences outside of the institute, having taken a socializing approach with its concomitant strong value statement, a major task emerges. That is, in this case, the institute must convince others, through persuasive means, of the propriety of its goals and methods rather than accepting some existing external definition of these. Though this is often more difficult than a coalition approach, it can in the long run mean the difference between extinction and healthy survival in the case where external priorities and goals are frequently shifting.

This point is a signal one for educational knowledge production where important aspects of the environment --most especially federal policy-- have been highly unstable almost from the time that the first R&D centers were created. Though committed to a notion of institutionalized R&D,[1] those who initially framed and oversaw the centers, and later the regional laboratories, worked within a bureaucratic environment buffeted by competing pressures. The nature of the ambiguity created made even more important the approach adopted internally, within an R&D center, in shaping an organizational capability to withstandstand these pressures. The pressures here referred to include:

- The federal administration which began the thrust for large-scale educational R&D was soon replaced by an administration unwilling and unable to continue strong support of massive domestic reform movements.
- Educational deficiencies in the schools of the nation having been made prominent, public clamor represented by congressional outcry, mounted , calling for rather immediate and dramatic change.
- The complex pattern of jurisdiction over schooling in America was coupled with a rise in teacher professionalization, and a demand by teachers for greater decision-making power. Additionally, calls for accountability joined with new legislation regarding privacy, on the one hand, and accessibility of records to students and parents, on the other hand. The articulation of a system of federally funded knowledge production institutes with the configuration of public schools and state and local agencies has become more rather than less difficult in the past decade.
- The federal government itself, the major overseer of the new knowledge production institutes, vacillated in its procurement and management techniques unsure whether its role was to support science or purchase technology or some mix of the two.
- The profound separation between professionals traditionally associated with knowledge production for education--those in Schools of Education--

and professionals engaged in related, relevant research--those in the social and behavioral sciences--was not such as to be immediately or easily breached. Hence, the knowledge produced in the new institutes was at times forced to travel a somewhat circuitious route from universities to schools, finding itself having to bypass what might have appeared to be natural linkage points.

Development of a Mission-Oriented Institute: An Overview

In 1964, one of the first two R&D centers established was the Learning Research and Development Center at the University of Pittsburgh. This author has been studying the LRDC for the past five years and in constructing a history of it has access to case study data collected since it was begun. By looking carefully at some of the crucial sets of decisions made in this one organization, we can learn something about certain strategies for change and their effects within the domain of knowledge production for education.

Philip Selznick, in Leadership in Administration, offers an analytical framework for understanding certain crucial aspects of an institution's development and his analysis has been useful for my own. Selznick isolates three important sets of decisions which define and shape an organization's structure as well as the kind of actions it will engage in over time. These three sets are:

> -selecting a social base, i.e., an audience, or set of these, for one's work, an external source of personnel and support;
> -building an institutional core, i.e., selecting, recruiting and shaping institutional membership;
> -formalizing procedure, i.e., establishing known, agreed upon routines and creating a particular cultural climate within which work proceeds.[2]

What I shall propose in this paper is that these concepts, important as they are, must be embedded in a larger understanding if the purpose is to

explicate mission-oriented R&D. LRDC conducts such mission-oriented R&D. By mission-oriented, it is meant that the program of research and development was initially undertaken and continues to be designed to contribute to the accomplishment of a goal of national importance, a goal which contains within it a strong value statement concerning appropriate procedures for schooling.

LRDC set out to accomplish research and development for the improvement of professional practice in schools specifically for --in its initial formulation--the provision of individualized instruction to meet the requirement imposed by the fact of individual differences among learners.[3]

The conception of individual differences is one rooted in a psychological understanding of the individual. It is a conception which motivates science-based research and development and which demands, then, an organizational climate for such research and development characterized by professionals committed to an institutional philosophy. (It is the science based nature of the research rather than its particulars which necessitate this climate.)

The creation, growth and nurturing of an institutional philosophy--for which the "mission statement" at any given time is a shorthand symbolic representation--is perhaps the most important function of leadership. The existence of such a philosophy, as bulwark of an organization, has implications both for recruitment of personnel as well as for socialization and development of role identities once members join the organization.

We have referred earlier to the environmental pressures which formed the context in which LRDC developed and grew. Clearly the Center had instrumental goals it hoped to accomplish. Yet had its leadership not taken a broader view, a systemic approach to inculcating its value system within the organization and among salient outside organizations, it is unlikely that the instrumental goals would have been achieved.

When Selznick writes of the three important decision sets, his points of reference--environment of the organization, internal staffing and the working out of a particular culture--are those useful in this case. Yet, his analysis is geared to a study of instrumental ends: does the organization gain a foothold in its environment? does it recuit appropriate staff? does it become institutionalized through the creation of certain formal procedures? In the case of LRDC, a mission-oriented research institute, these questions must be looked at in a context which asks, how were these things accomplished given the particular nature of the organization and of its purposes? And--and here Selznick's points and our own coalesce--what is the nature of leadership in this process?

Selecting a Social Base

For LRDC, in the initial years, the question was not so much "selecting" a base of support outside of the organization as, largely, creating one. When Selznick discusses this phenomenon he uses the word "allies" and in this case that term comes closer to what was called for than "clientele" or "market." The cultivation of allies, of social bases of support for LRDC work, centered on several audiences: the University of which the Center was a part; the disciplines and professions most represented by the Center's staff; sponsoring or funding agencies; and public schools. It was necessary that each of these audiences be made aware of LRDC's approach to knowledge production for education and that each become convinced of the propriety, the desirability, of the Center's goals and the means chosen for achieving those goals.

Center leaders made clear from the start, in the initial proposal to the Office of Education, that the Center's purpose was to develop a linking science, a domain of inquiry meshing behavioral social science questions and educational concerns. This purpose, this bringing together of previously disparate strands of inquiry, made for initial difficulty.

Social and behavioral scientists had long before, in the main, abandoned education as a subject of concern. Educators had, likewise, developed a sense that their expertise precluded understanding by those largely unfamiliar with the workings of classroom process.

As an initial step, there was emphasis placed on the academic, scholarly and scientific nature of the enterprise. This led to the convening of a series of conferences, to the issuance of scholarly publications, to the seeking and winning of offices in the professional and scholarly organizations. Especially important in this last case was the Center leadership's sponsorship of the notion of "instructional psychology" within the American Psychological Association as well as the heavy involvement of Center leaders and faculty in the topmost offices of the AERA. These techniques gave the Center visibility and prominence in academic circles and among those who place a high value on traditional scholarship.

Within its own University, LRDC established relationships with the departments of sociology and psychology. The Center began to show through its work that education and schooling were domains in which serious scholars might ask questions of importance both to the basic disciplines and to educational practice. By adopting the strategy of pursuing research using conventional methods, new questions were introduced slowly. Center members worked in ways compatible with the quality standards for research subscribed to by these disciplines. In addition, the Center's ability to provide money to pay for joint appointments was an important factor. By itself, money would not have been sufficient, as the relevant departments would have been reluctant to take on even part of new faculty members along with a questionable second organization. It was necessary that the disciplines be convinced of the quality of the work being pursued. Such conviction was fostered by publication in esteemed journals and attention given to the Center's work by established leaders in the field (e.g., members of the Center's Board of Visitors.)

Many faculty in the School of Education --and of course those associated with both the Center and this School--came to share the Center's values also and to support its efforts. Other faculty of that School--and among these those who felt that there were more promising avenues to school improvement than the R&D approach as well as some who agreed with the approach but were not invited to be associated with LRDC--viewed the Center with some hostility. Among other things, they saw the potential success of the Center's R&D as a threat to other dissimilar approaches to educational problems. In addition, LRDC was set up within the University structure on a par, organizationally, with that School and other equivalent units (LRDC's leaders report to the Provost as do the Deans of professional schools). This, too, caused some suspicion.[4]

With regard to funding agencies, the interaction has been an interesting one. As LRDC has maintained, and expanded upon, its initial conception of goals and means, it has on occassion been "out of tune" with the thinking of the major sponsors. For example, throughout the '60's, when the development of instructional materials was seen as an avenue for rather immediate changes in classroom techniques, LRDC was, in fact, developing individualized curricula. Yet, simultaneously, the leadership recognized a need for continuing basic research and insisted on investing a proportion of funds, a "risk capital," in this activity. From LRDC's perspective the continual shaping of basic psychological research to an instructional psychology was essential. Similarly, currently, when the major emphasis flowing from federal sponsors focuses on research for basic skills improvement, a course has been steered which retains expertise and interest in instructional design. This insistence on keeping viable the overall institutional purpose may have been troublesome, in some respects, yet to it can be attributed the development of a programmatic body of work, a major strength of the organization. Finally, with respect to sponsors and funding agencies, a conscious decision to interact collegially with representatives of these agencies has, in the main, engendered relationships of cooperation even in times of disagreement or confusion.

With regard to public schools, LRDC has maintained a number and variety of relationships: development schools, demonstration schools, Follow Through network schools, schools remote--geographically and otherwise--from the Center using Center-developed products. A significant difficulty is encountered when close cooperation is attempted between science-based R&D and a public school. The problem has a lot to do with the nature of research and development and how it must proceed. School people want and expect cooperation with University professionals to make rather immediate differences in some way, especially in student achievement. R&D personnel want and need to work with schools primarily to further refine and develop instructional materials and other knowledge products. Dramatic gains tend to be slow in coming and a lot of day-to-day in-school development work has to be done in the meantime. On at least two important points, there is a discrepancy of expectations between schools and an R&D center. One is the perception of allowable time before results may be expected and the other is the institutional ability--or lack of it--to tolerate failure. Research and development is a slow process, involving projects of several years' duration. School professionals, increasingly, are under pressure to achieve results quickly, and at least over the duration of the academic year. Secondly, the R&D process tolerates, even expects, some degree of failure--some ideas don't work, some initiatives are better terminated midway than seen to completion. The structure of the school is such, the pressures exerted by public opinion and by school district administrative authority, that rarely would a teacher feel free to admit or tolerate failure. In the overwhelming majority, the schools which have had contact with LRDC have come to be supportive both of the Center's products and of an R&D approach to school improvement. Given the local nature of school operations in this country, it remains the case that improvement in school practices proceeds at a slow, non-continuous rate in those areas where it exists at all. [5]

Creating an Internal Core

Building or creating a social base helps to define an organization--to delimit, sometimes sharply--what it can or will do vis-a-vis other, outside groups. In similar fashion, building the internal core, deciding on kind and number of staff, strongly defines institutional capability and character. Creating a core involves more than selective recruitment, though that process is an integral part of the larger one. It is necessary also that personnel share some key, shaping experiences. In the case of LRDC, it was essential that core members internalize the notion of a linking science and the value attached to that point. By having in common particular situations, especially those which arose in formative periods of organizational growth, members internalized, sometimes by defining together, the organization's value system. While it is the role of the leader in these situations to decide, frequently, on matters effecting the values of the organization, particularly in a mission-oriented institution leaders do so by building and maintaining consensus rather than by fiat. The major problem of leadership in core creation is that of control [6] as the experiences which shape institutional values are both planned and conscious and unplanned, naturally occurring in day to day operations.

Regarding recruitment, there have been several patterns. Early recruitment to the Center of one or two "stars"--highly regarded academics from other institutions--proved far less successful (in that they have left the organization, having had little or no impact on its work) than slow cultivation of younger or less formed talent. [7] This is yet another indicator of the socializing vs. the coalition approach which was adopted. Bringing to the nascent Center professionals with firmly established research activities and value systems proved incompatible with the dominant means for pursuing research, namely, integrating individual work into a larger, cohesive whole. Hence, an informal "grow your own" policy was adopted, consisting of two different kinds of mechanisms. The first was recruitment

of new Ph. D. 's whose research careers were molded to the conduct of instructional psychology as that was taking shape at the Center. The second was the encouragement of LRDC staff already in place to pursue obtaining a degree and enchancing and enlarging upon skills they already possessed.

The second aspect of core creation, the sharing of key experiences, has been both planned and serendipitous. The need for certain kinds of occassions, ceremonial and/or substantive, which bring together all Center members or all Research Associates was recognized early. Board of Visitors' meetings and official site visits have been used as internal solidifying devices as well as opportunities for communication with outsiders. The series of substantive conferences, held approximately biannually since the Center was established, have been similarly used at least for faculty level personnel. Speakers brought to the Center through arrangement of its colloquium committee serve a similar purpose. More recently, the preparation of reports and plans for sponsoring agencies has involved all faculty level personnel rather than just Center directors in thinking about the long-range work of the organization. A number of LRDC committees, but especially the publications and executive committees, with their rotating membership, serve as socializing and solidifying experiences. Finally, even if inadvertently, the press of federal indecision in the last several years, the environment of bureaucratic ambiguity within which the Center staff has had to live, has also served the purpose, frequently, of creating internal cohesion. As the Center is more nearly a community of scholars than an organization table of projects, a common threat from the environment tends to enhance solidarity.

Selective recruiting, building a senior staff from within and creating and using key experiences have all helped to shape the kind of organization LRDC has become. Even more than with the creation of a social base, these experiences resulted from deliberate, planned decisions of the leadership. The third category of crucial decisions, the next focus of this paper, is one which consists almost entirely of deliberate forethought.

The Formalization of Procedures

Within any organization there is a push to formalize certain kinds of procedures, to reduce dependence on whimsical or unpredictable decision-making, to increase security and certainty. Many organizations may simply adopt a set or subset of procedures found in existing, similar situations. For LRDC, and the other newly created educational R&D centers, the problem was more complex as no exact prototype existed. Rather, procedures needed to be designed choosing from among the mix available in academic departments, industrial R&D organizations, etc. The present variations among centers (and even more, between these and laboratories) attests to the different kinds of decisions that were made in the early years.

At LRDC, a pattern of procedures evolved slowly. A few crucial ones were set from the start. Others emerged. Overall, the pattern established was such as to make the Center quite different from an academic department though very clearly a university, rather than an "industrial" entity.

An indicator of this can be found in the policies and procedures regarding faculty. From the start it was clear that the Center faculty, Research Associates, would hold joint appointments with academic departments whenever possible, but that tenure, when granted, would come solely from those departments. Over time, a fairly formal set of procedures for becoming a Research Associate were agreed upon and used. The procedures call for candidates: to be interviewed by a number and mix of existing Research Associates, (in the earliest days, all professional staff--g.r.a.'s, r.a.'s, etc.--were interviewed by several Center members other than the one offering employment); to present a colloquium on work done or in progress; to be discussed at a meeting of Research Associates; and to be voted on by all Research Associates in a written secret ballot, a majority of votes being required for acceptance.

This entire set of procedures reinforces the notion that the Center is an academic community, not just an organization. The discussion time

built into the process is used not only to talk of the specific candidate but also to air community concerns regarding recruiting, staff, organizational composition.

For Research Associates in place there has been a review system for many years, its particulars revised periodically. Research Associate review has long been a job of the executive committee, an elected committee, with the Co-directors heavily involved. Following review, each Research Associate has an individual feedback session with the Co-directors.

One of the criteria used in the review process is, itself, another aspect of procedure, one which distinguishes the Center from an academic department. That is, Research Associates are assessed in terms of their ability to interact--and actual record of having done so--with other Research Associates. Optimally, joint planning and work are being carried out by several Research Associates together. This may be taken as an indication of the pervasive quality of the Center's mission, as this is an example of the shaping of role identities and requirements by institutional purpose.

Over the years joint work among Research Associates has been encouraged and facilitated in a number of ways, while rarely mandated. It is in the academic nature of the place that people have not been told what to do;[8] however, pressure of various kinds has been exerted to a degree unknown in an academic department. Such pressure has been exerted primarily through resource allocation, where resources include not only finances but also staff, graduate research assistance, etc.

It may seem unusual to label this phenomenon "procedure." Yet it is in the sense that procedures set the tone of an organization, that they establish guidelines to be followed or aimed for, that they are part of the culture of an organization and not the whimsy of a particular individual. In recent years, the Center's leaders have presented to the sponsoring agency a picture of the organization as one comprising a total interrelated program of research. This is a communication, through the organization chart, to those within and those outside of a picture of and for research and development activity. It is a graphic representation of the Center's mission.

Leadership Style and Structure

Each of the three areas of decisions discussed implies a particular form of leadership. Elements of the structure and content of that leadership can be discerned. However, first it is important to note that LRDC is an evolving organization and that it has had some changes in leadership, even recently. What it is possible to discuss then are those aspects of leadership which proved to be crucial in the initial ten to twelve years.

> Group leadership is far more than the capacity to mobilize personal support; it is more than the maintenance of equilibrium through the routine solution of everyday problems; it is the function of the leader-statesman--whether of a nation or a private association--to define the ends of group existence, to design an enterprise distinctively adapted to these ends, and to see that the design becomes a living reality. These tasks are not routine; they call for continuous self-appraisal on the part of the leaders. . . [9]

This description from Selznick summarizes the most important aspects of leadership as it has been exercised at LRDC. The strongest emphases have been placed on value maintenance and reflectivity. Both by exhortation and by example Center leaders have stressed knowledge production which meets the quality criteria of the basic disciplines. In addition, there has been strong emphasis on reflection, on the taking of time and the creation of opportunities to consider the mission of the Center, the ongoing work and the fit between the two.

This is perhaps more unusual than it would at first appear. For it must be recognized that a new enterprise such as LRDC could have become a highly reactive organization. It would not have been difficult for the nascent Center to have been pushed off course. That it wasn't is in large part due to leadership behavior which emphasized productivity and reflection and which, especially in the early years, absorbed a high degree of uncertainty at the boundary of the organization rather than allowing it to permeate.

The integrated research program which developed also owed much to the conception of the organizational mission the leadership had constantly in mind. The specification of the mission of LRDC by its leaders has been a blend of content and method at a level of abstraction that necessitated definition and redefinition. This made flexibility possible without goal deflection and created, also, an opportunity for continuity of major personnel. The Center's leaders have used the mission both as a description of ongoing work and a prescription for work to be undertaken.[10] This utilization of a value statement as an organizing device has been a salient feature of leadership.

Throughout most of its history, LRDC has been headed by co-directors. This dividing and sharing of both leadership responsibilities and administrative concerns has made possible the diffusion of management problems and rewards. Moreover, as a co-directorship has appeared to work well at the topmost level, it has been encouraged at lower levels as well.

Co-directorship has, at least, two important effects. First, though a two-person "tyranny" is not impossible, it is not only less likely, it is less likely to be supposed. That is, when important decisions necessarily involve consensus between two people, greater discussion is likely to take place with a lessened probability of whimsical or narrowed thinking. Further, as this becomes obvious, the decision-making that does ensue carries greater validity with those whom it effects, arousing less suspicion and engendering greater confidence than is likely to be the case under a one-person rule. Second, and related to the first point, a co-directorship at any level that brings together people of different training or professional expertise (and by and large, LRDC co-directorships have done just that) produces a decision-making process which reflects the interactive character desired of Center work generally. Finally, in having two people at the "top" of an organization, there is increased opportunity to discuss matters with the leadership. Also, it has often been the case, for a number of reasons, that people are more comfortable with one or another of the Co-Directors and having the choice increases the probability of communication taking place.

Conclusions

Fourteen years ago, a group of institutions was begun with the mandate to conduct research and development that would change and improve school practices. Confusion and uncertainty have been salient characteristics of the environment for knowledge production in education in these past years. Competing demands and pressures, from a constantly growing number of sources, have been voiced regarding what should be done about American schooling.

Some aspects of the growth of one of the research and development institutes established in 1964 have been examined here. That Center's development points to the importance of the following considerations:

- It is necessary to take a systemic view in planning for organizational growth, one which takes account of strategies for the accomplishment of both indirect goals as well as instrumental ones.
- Mission-oriented programmatic R&D for education is premised on linkages, between disciplines and the practicing profession, between professionals of different training.
- Linkage creating science has been, in this case, facilitated by a socializing approach rather than an attempt at coalition. This approach implies socialization not only of members of the organization but also of agencies and audiences external to it.
- In addition to selective recruitment and internal socialization, other mechanisms for creating a core culture include the way policies and procedures are shaped and the kinds of value-infusing experiences which can be offered or utilized as they naturally occur.

-In organization development of this kind, leadership is crucial. The leader's primary tasks are those involved in value creation, value maintenance and value infusion.

Leadership and organizational philosophy, in a case such as this one, are intertwined in an almost tautological fashion. Though not necessarily a model for many different kinds of organizational development, in this new domain--science-based knowledge production for education--this connection has provided institutional stregth and the ability not just to survive but to grow.

Footnotes

1. See, for example, Ward S. Mason and Norman J. Boyan, "Perspectives on Educational R&D Centers," Journal of Research and Development in Education, 1:4, 1968, p. 190-202.

2. Philip Selznick, Leadership in Administration, Evanston, Ill.: Row, Peterson and Co., 1957, p. 104-107.

3. At the present time, having undergone several evolutionary changes, the mission of the LRDC is stated, briefly, as the accomplishment of an "adaptive education program. . . a program of research and development aimed at providing both knowledge and products that can contribute to the improvement of education, particularly the education of elementary and middle school children . . . (education) adaptive to individual differences." The Adaptive Education Program, Learning Research and Development Center, Milestone Report # 12, October, 1977, p. 1.

4. The modern history of separation between educators and those in the basic disciplines has been noted in many sources. For a recent discussion, see, Robert Glaser, "Introduction: Toward A Psychology of Instruction," in R. Glaser, editor, Advances in Instructional Psychology, Hillsdale, N.J.: Lawrence Erlbaum Associates, in press, p. 10-16.

5. For a discussion of R&D utilization that is enlightening see Chapter 6, DATABOOK, The National Institute of Education, 1976.

6. Selznick, op. cit., p. 106.

7. This author has discussed these issues in detail in "Managing Multidisciplinarity: Building and Bridging Epistomologies in Educational R&D," ERIC # SP 101 814.

8. Certain tasks, e.g., curriculum development, by their nature impose a much stronger pattern of work than others, e.g., psychological research on memory, where the individual researcher is somewhat more free to design a work plan.

9. Selznick, op. cit., p. 37.

10. For a discussion of the distinction between "models of" and "models for" human activity, see Clifford Geertz, The Interpretation of Cultures, New York: Basic Books, 1973, p. 93-95.